

Cancel claims 1 and 14 without prejudice.

#### REMARKS

Claims 1 and 14 have been canceled and Claim 18 has been substituted therefore to more clearly define Applicants' invention. Claims 2-13 and 15-19 are now pending in this case.

In view of the foregoing amendments to this application and the following remarks, it is respectfully submitted that the claims of this application are now in a condition for allowance and favorable action thereon is respectfully requested.

Claims 1-4, 14 and 17 were rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa et al. (U.S. Patent No. 6,064,734) in view of Takagi et al. (U.S. Patent No. 5,251,329). This rejection is based upon the following logic as applied by the Examiner:

"Regarding Claim 1, Hasegawa discloses a telephone (10) comprising a first part (body 1), a second part (2) attached to the first part movably between a first (retracted) and second (extended) position, and where the first part includes a transceiver and antenna (4) coupled thereto. Hasegawa fails to disclose the second part has an arrangement for attaching a battery, but discloses a keypad and microphone.

However, Takagi teaches a second part (15) in which a microphone and arrangement for attaching a battery (Figure 14, microphone and battery contained within housing which is attachable to phone body 1) are present. Further, the second part is movably coupled to a first

part (1). As Takagi teaches that it is known in the art to integrate a microphone and battery attachment mechanism, and Hasegawa disclose that it is known in the art to have two parts movably coupled, it would have been obvious to one of ordinary skill in the art at the time of the invention to include a battery attachment mechanism in a movably coupled second part in order to provide separate modules for particular functions of the telephone."

Claim 5 was rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa et al. and Takagi et al., and further in view of Bremer (U.S. Patent No. 6,018,671). Claims 6-10 and 16 were rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa et al. and Takagi et al. and further in view of Hansen et al. (U.S. Patent No. 5,956,625). Claims 11-12 were rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa et al., Takagi et al., and Hansen et al. and further in view of Kobayashi (U.S. Patent No. 5,995,809). Claim 13 was rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa et al. and Takagi et al. and further in view of Collins (U.S. Patent No. 6,038,313). Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa et al. and Takagi et al. and further in view of Kivela (U.S. Patent No. 5,918,189). It is respectfully submitted that none of the prior art references cited by the Examiner whether considered by themselves or in any combination with one another, disclose or even remotely suggest applicants invention.

The present invention relates to the structure of a telescopically expanding telephone and to the location of its various elements. The object of the present invention is to introduce a telephone which is small in the transport

position, but is still provided with a large-size user interface. Another object of the present invention is that the telephone is easy to use, durable and ergonomic. Yet another object of the invention is that in the regular usage position, the telephone antenna does not fall in the shadow of the user's hand.

The objects of the present invention are achieved by locating, in the upper part of the telephone, an antenna and the radio frequency parts, among others; and in the lower part, the power source and the major part of the keys, among others. The lower part and the upper part are movably attached to each other, so that the telephone has a small-size transport position and a larger-size operating position.

The telephone according to the features of the present invention comprises a first part and a second part attached thereto, the second part being movable in relation to the first part between a first position and a second position. The invention is characterized in that in the first part it comprises a radio transmitter/receiver and a connected antenna, and in the second part an arrangement for fastening the battery to the second part.

According to a preferred embodiment of the present invention, the upper part of the telephone according to the invention comprises at least an antenna, a radio transmitter/receiver, a loudspeaker, a microphone and a display as well as part of the keys and a scanner for a smart card. The lower part comprises an arrangement for fastening a battery or a corresponding power source for the telephone, as well as the major part of

the keys. the lower part is designed so that during operations, it is natural for the user to hold the lower part of the telephone in hand. Thus, the antenna provided in the upper part is not left in the shadow of the user's hand, and not even very near to the hand. The battery attached to the lower part is a fairly heavy component, which improves the ergonomy of the telephone according to the invention in comparison with for example the telephone according to Figure 3, where the lower part is very light. By installing the telephone components in the upper and the lower parts in an advantageous fashion the number of electric contacts in between said parts is kept small, which is advantageous for usage security. In particular, the invention enables the use of a relatively large display and keyboard even in a small mobile phone.

Hasegawa et al. disclose a telephone which includes a keypad housing. The keypad housing slicks in and out of an opening in the telephone. In the retracted position, the keypad housing is held within the opening. This provides for a telephone which is small and compact. The keypad housing may be pulled out and latched in the extended position. In the extended position, the user has access to the keypad which is disposed in the tope of the keypad housing. The resulting telephone is small and compact when the keypad housing is retracted, yet allows for the user access to a full sized keypad when the keypad housing is extended.

Takagi et al. disclose a radio telephone apparatus for transmitting and receiving information signals as electrical waves include a main body section towards one end of which a

speaker unit is enclosed. A battery casing accommodating a battery which is adapted for supplying power to the main body section is detachably mounted on the other end of the main body section to reduce the size and the thickness of the apparatus. A ringer device is enclosed within the battery casing so that the acoustic sound emitted by the ringer is prevented from reaching the user's ear which is in the vicinity of the speaker unit. The microphone for the radiotelephone apparatus is also enclosed within the battery casing.

Basically, the Examiner has argued that Hasegawa (U.S. Patent No.: 6,064,734) discloses a telephone where two parts are movably coupled to each other, so that a first part comprises the radio transceiver and its antenna. Hasegawa's second part does not comprise an arrangement for attaching a battery thereto, but since Takagi (U.S. Patent No.: 5,251,329) shows how a battery could be attached to essentially any part of a telephone, it would have been obvious to apply the teaching of Takagi to attach a battery to the second part of Hasegawa.

It is respectfully submitted, however, that applicants claimed structure for a telescopic telephone is meant to be held in the user's hand so that the user grips the lower part, i.e. the one that houses the battery attachment means. Note column 6, lines 45-50 in Hasegawa; the fact that the Hasegawa telephone is operable in both the extended and the retracted positions implicitly proves that Hasegawa's disclosed telephone is to be held by the upper part. The slim form and delicate structure of Hasegawa's keypad part confirm that the keypad part should not be touched otherwise than for using the

keys or for pressing it into the retracted position. As a consequence of the Hasegawa disclosed structure as well as the fact that the battery is the heaviest part of a modern mobile telephone, the center of gravity is located "conveniently" in applicant's telescopic telephone. By "convenient" it is meant that when the user holds the telephone by the lower part, the heaviest components are located within the palm area of the user, making the telephone feel solid and sturdy. It is requested that the Examiner try this by grabbing some elongated object at one end of the object of which is clearly heavier than the other. Try grabbing at both ends in turn. Unless it is intended to use the object as a hammer, the Examiner will feel much more confident if the center of gravity is within his palm area.

Neither the Hasegawa et al. or Takagi et al. patents disclose any grip designs so that is left to the imagination of the reader which part of the telephone is to be gripped. Especially the Hasegawa et al. disclosed structure is such where a person skilled in the art would never consider gripping it by the keypad part. For the same reason the person skilled in the art would not contemplate attaching a Takagi et al. battery to the Hasegawa et al. keypad part, and even if one did, one would not place it parallel to the keypad, but as an extension thereto.

As a further consequence of the lower part of the telephone being the part to be grabbed, applicant's telephone runs a clearly lower risk of the antenna to be shadowed by the user's hand during a call. Applicant clearly states that the antenna should be located in the upper part. Especially taking into

account the modem trend towards planar internal antennas located within the cover of a mobile phone, it is advantageous if the upper part is left free from an enclosing grip of the user's hand.

As a still further consequence of the keypad being the part to be grabbed, structural considerations and strength calculations become easier. Consider a heavy-handed user keying in a number into the Hasegawa telephone with its keypad part extended. Every push of a key tends to bend the slim keypad part, causing heavy stress to its attachment rails. In applicant's telephone the user uses his own hand as a mechanical support to the keypad part, and little structural stress is directed on the telescopic attachment means that join the two movable parts together.

Applicant suggests that the battery be located at least partly underneath the keypad (see battery 610 and keypad 609 in Fig. 6a of applicant's application). If one applies the teaching of Takagi et al. to any one of the cited reference documents, including Hasegawa, et al., the result is a battery part that is attached to some part of the telephone as an extension to its existing dimensions. In Hasegawa et al. this would greatly add to the disadvantages described above; the center of gravity of the Hasegawa et al. telephone would move still further away from the user's grip, the mass of the battery would add to the stress on the attachment rails since the every mechanical movement would tend to make the (perforce somewhat flexible) keypad part oscillate like any thin blade with a mass at its free end, and the key presses of the heavy-handed user would do exactly the same with just a pronounced

effect. In Applicant's structure the parallel arrangement of a battery and a keypad is advantageous, because the inherent stiffness of the battery can be utilized as an additional mechanical support to the keypad.

Where do any of the references cited by the Examiner disclose or even remotely suggest the above-described advantages in a telephone?

It is submitted to the Examiner, that obviousness is a question of law. Panduit Corp. v. Dennison Mfg. Co., 810 F.2d 1561, 1568 (Fed. Cir. 1987) cert. denied, 481 U.S. 1052 (1987). The courts have held that the proper approach to the obviousness issue starts with the claimed invention as a whole. Kimberly-Clark Corp. v. Johnson & Johnson, 745 F.2d 1437, 1448 (Fed. Cir. 1984). The invention as a whole embraces the structure, its properties and the problem it solves. In re Wright, 848 F.2d 1216, 1219 (Fed. Cir. 1988). Section 103 is applicable when there is no single prior art item that completely discloses, i.e., anticipates, the claimed invention. Kalman v. Kimberly-Clark, 713 F.2d 760 (Fed. Cir. 1983).

The proper approach to making a determination of obviousness was described by the Supreme Court in Graham v. John Deere Co., 383 U.S. 1, 17 (1966):

Under §103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background,



the obviousness or nonobviousness of the subject matter is determined.

An invention is not obvious merely because it is a combination of old elements, each of which is well known in the art at the time the invention was made. Kimberly-Clark Corp. v. Johnson & Johnson, 745 F.2d at 1448; Reiner v. I. Leon Co., 285 F.2d 501, 503 (2d Cir. 1960), cert. denied, 366 U.S. 929 (1961). If the combination is novel, the issue is whether bringing them together as taught by the patentee was obvious in light of the prior art. United States v. Adams, 383 U.S. 39, 50 (1966). The critical inquiry is whether "there is something in the prior art as a whole to establish the desirability, and thus the obviousness, of making the combination." Fromson v. Advance Offset Plat, Inc., 755 F.2d 1549, 1556 (Fed. Cir. 1985), citing Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co., 730 F.2d 1452, 1462 (Fed. Cir. 1984). Obviousness "cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination." In re Fine, 837 F.2d 1071, 1075 (Fed. Cir. 1988), quoting ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 1577 (Fed. Cir. 1984).

In resolving questions of obviousness, the test to apply is (1) whether the prior art would have suggested to those of ordinary skill in the art that they should make the claimed device and (2) whether the prior art would also have revealed that in so making, those of ordinary skill would have a reasonable expectation of success. In re Vaeck, 947 F.2d 488, 493 (Fed. Cir. 1991). Both the suggestion and the reasonable

expectation of success must be founded in the prior art, not in the applicant's disclosure. *Id.* at 493. See also In re Merck & Co., Inc., 800 F.2d 1091, 1097 (Fed. Cir. 1986).

To reject claims in an application under section 103, an examiner must show an unrebutted prima facie case of obviousness. See In re Deuel, 51 F.3d 1552, 1557, 34 USPQ2d 1210, 1214 (Fed. Cir. 1995). In the absence of a proper prima facie case of obviousness, an applicant who complies with the other statutory requirements is entitled to a patent. See In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

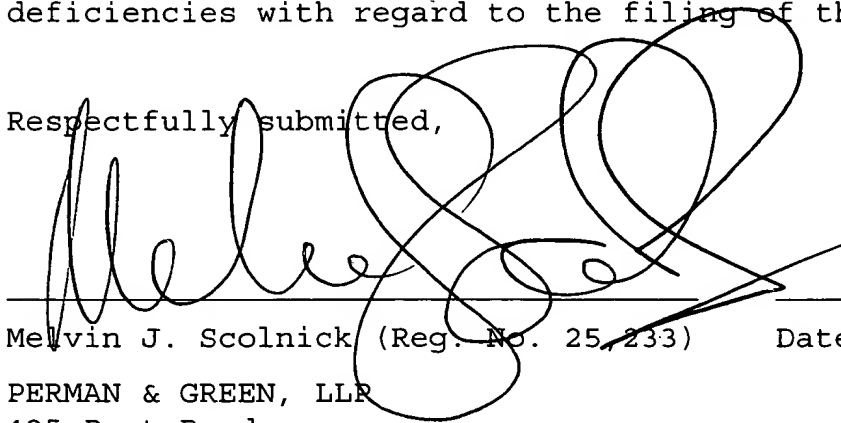
When a rejection depends on a combination of prior art references, there must be some teaching, suggestion, or motivation to combine the references. See In re Geiger, 815 F.2d 686, 688, 2 USPQ2d 1276, 1278 (Fed. Cir. 1987). Although the suggestion to combine references may flow from the nature of the problem, see *Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc.*, 75 F.3d 1568, 1573, 37 USPQ2d 1626, 1630 (Fed. Cir. 1996), the suggestion more often comes from the teachings of the pertinent references, see In re Sernaker, 702 F.2d 989, 994 217 USPQ 1, 5 (Fed. Cir. 1983), or from the ordinary knowledge of those skilled in the art that certain references are of special importance in a particular field, see *Pro-Mold*, 75 F.3d at 1573 (citing Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 297 n.24, 227 USPQ 657, 667 n. 24 (Fed. Cir. 1985)). Therefore, "[w]hen determining the patentability of a claimed invention which combines two known elements, 'the question is whether there is something in the prior art as a whole to suggest the desirability, and thus the

obviousness, of making the combination." See In re Beattie, 974 F.2d 1309, 1311-12, 24 USPQ2d 1040, 1042 (Fed. Cir. 1992) (quoting Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 730 F.2d 1452, 1462, 221 USPQ 481, 488 (Fed. Cir. 1984)).

For all of the foregoing reasons, it is respectfully submitted that all of the claims now present are clearly novel and patentable over the prior art of record. Accordingly, favorable reconsideration and allowance is respectfully requested. Should any unresolved issue remain, the Examiner is invited to call Applicant's Attorney at the telephone number indicated below.

Please charge deposit account No. 16-1350 for any fee deficiencies with regard to the filing of this Amendment.

Respectfully submitted,

  
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Application No.: 09/268,080

MARKED UP SPECIFICATION REPLACEMENT SECTION(S)

[ABSTRACT] ABSTRACT OF THE DISCLOSURE

A telephone comprises a first part [(601)] and a second part [(602)] attached thereto, said second part being movable in relation to the first part between a first position and a second position. The telephone further comprises in the first part a radio transmitter/receiver [(604)] and a connected antenna [(603)], and in the second part an arrangement for attaching the battery [(610)] to the second part.

## MARKED UP CLAIM(S)

2. A telephone according to claim [1] 18, additionally comprising in the first part a display and a quick-action keyboard, and in the second part a number keyboard.

3. A telephone according to claim [1] 18, additionally comprising in the second part a module which comprises

- a circuit board of the number keyboard,
- a charging connector to form a connection to an external charging device arranged to charge a battery attached to the second part, and
- a connector to form an electric connection between the first and the second part.

6. A telephone according to claim [1] 18, wherein the second part is slidably movable in relation to the first part in between the first and the second position, for which function the second part comprises slide rails and the first part comprises matching counter-rails.

13. A telephone according to claim [1] 18, wherein the second part is rotatably movable with respect to the first part in between the first and the second position, for which function the telephone is provided with a hinge in between the first and the second part.

16. A telephone according to claim [1] 18, additionally comprising means for receiving an incoming call by adjusting

said first part from the first position to the second position.

17. A telephone according to claim [1] 18, characterised in that it is a mobile phone of a digital cellular network.